Kissinger, Lon

From: Kissinger, Lon

Sent: Friday, June 06, 2014 5:33 PM **To:** Brown, Katherine; Grepo-Grove, Gina

Cc: Fleming, Sheila

Subject: Comments on Seldovia QAPP

Attachments: Fish tissue sampling QAPP 06022014-review-ggg-LK.docx

Hi,

Though this version is much improved, I still have major concerns about this project. Given how limited EPA's budget is, more time needs to be spent to develop QAPPs that will produce data that truly meet data quality objectives. EPA should not be providing money for projects that are inadequately designed.

Major areas of concern include:

- Lack of maps and figures to clearly visualize background material and project design.
- Inadequate evaluation of numbers of samples required to meet data quality objectives (e.g. effect of location and season) and to support statistics (e.g. 95% UCLs and tests of significance).
- Need for clearer presentation of sample processing
- Inability to review the appendices describing analytical techniques.
- Need for clearer linkages between data quality objectives and project design.
- How does the life cycle of sockeye salmon affect body burdern (e.g. age of out migration and age of return).
- How do locations of contaminant sources and types of contaminants released from those sources figure into determining sample locations?
- Compatibility of analytical methods chosen with those used to collect existing data.
- Adequacy of reporting limits for analytical methods to detect levels of concern (e.g. either those found in background areas or risk based analytical concentration goals).
- Though adult sockeye salmon are of great economic, nutritional, social, and spiritual value. Some consideration should have been given to sampling life stages that might be more affected by localized contamination (e.g. eggs, juveniles). In addition, some consideration should have been given to selecting other important species that have contaminant body burdens that reflect local conditions.

Regards,

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